

IN THE CLAIMS:

Claims 12 and 15 are amended herein. Claim 31 was previously canceled. All amendments and cancellations are made without prejudice. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously Presented) A method for the electroless deposition of a desired metal layer on one or more selected portions of a substrate surface, wherein the substrate has a film of indium tin oxide (ITO) formed thereon and wherein the method includes the steps of:

applying a masking layer onto the substrate surface, said masking layer adapted to have one or more apertures formed therein so as to expose one or more selected portions of the substrate surface;

exposing the one or more selected portions of the substrate surface to a colloidal suspension of catalytic particles adapted to adsorb to the substrate surface and to enhance deposition of a desired metal layer thereon; and

exposing the one or more selected portions of the substrate surface to an ionic solution containing ions of the desired metal to enable formation of the metal layer on said one or more selected portions.

2. (Original) A method according to claim 1, wherein the one or more apertures are formed in the masking layer after applying the layer to the substrate surface.

3. (Original) A method according to claim 2 wherein at least some of the one or more apertures of the masking layer lie over one or more portions of the ITO film.

4. (Previously Presented) A method according to claim 1, wherein the colloidal suspension includes particles of catalytic metal.
5. (Original) A method according to claim 4 , wherein, when the substrate surface includes a film of ITO formed thereon, the catalytic metal and the material of the substrate are selected so that no substantial adsorption of the catalytic metal occurs on the substrate material.
6. (Previously Presented) A method according to claim 4, wherein the catalytic metal is palladium.
7. (Previously Presented) A method according to claim 4, wherein the catalytic metal particles are polymer-stabilised.
8. (Previously Presented) A method according to claim 7 , wherein the catalytic metal particles are stabilised with polyvinyl alcohol, poly(vinylpyrrolidone) or a combination thereof.
9. (Previously Presented) A method according to claim 4, wherein the catalytic metal particles are stabilised with a solution containing tin ions.
10. (Previously Presented) A method according to claim 5, wherein the substrate material is glass.
11. (Previously Presented) A method according to claim 1, wherein the masking layer is formed of a polymeric material to which no substantial adherence of the catalytic particles occurs.

12. (Currently Amended) A method according to claim 11, for the electroless deposition of a desired metal layer on one or more selected portions of a substrate surface, wherein the substrate has a film of indium tin oxide (ITO) formed thereon and wherein the method includes the steps of:

applying a masking layer onto the substrate surface, said masking layer adapted to have one or more apertures formed therein so as to expose one or more selected portions of the substrate surface, wherein the masking layer is formed of a polymeric material to which no substantial adherence of catalytic particles adapted to adsorb to the substrate surface and to enhance deposition of a desired metal layer thereon occurs, and the polymeric material is selected from the group consisting of suitable polycarbonates, fluorinated polymers, cellophane, polyimide and acrylate-based polymers;

exposing the one or more selected portions of the substrate surface to a colloidal suspension of catalytic particles adapted to adsorb to the substrate surface and to enhance deposition of a desired metal layer thereon; and

exposing the one or more selected portions of the substrate surface to an ionic solution containing ions of the desired metal to enable formation of the metal layer on said one or more selected portions.

13. (Previously Presented) A method according to claim 11, wherein the polymeric material is a photoresist.

14. (Previously Presented) A method according to claim 1, wherein the masking layer is formed of a dry film resist.

15. (Currently Amended) A method according to claim 14, wherein the dry film resist is selected from the group consisting of Asahi Chemicals Sunfort™ resists and DuPonts Riston™ resists a photosensitive material.

16. (Previously Presented) A method according to claim 11, wherein the one or more apertures in the masking layer are formed using UV lithography, a laser or screening means.

17. (Previously Presented) A method according to claim 1 wherein, prior to the step of exposing the selected portions of the substrate to the colloidal solution, the layered substrate is cleaned to remove any residues of polymeric or organic material.

18. (Original) A method according to claim 17, wherein the cleaning is effected by plasma cleaning or UV ozone cleaning techniques.

19. (Previously Presented) A method according to claim 1, wherein the step of exposing the one or more selected portions of the substrate to the colloidal solution is effected by dipping the substrate containing the masking layer into a bath of the colloidal solution.

20. (Previously Presented) A method according to claim 1, wherein, after the step of exposing the one or more selected portions of the substrate to the colloidal solution, the selected portions are rinsed with de-ionised water.

21. (Original) A method according to claim 20 wherein, after the rinsing step, the selected portions are dried to remove substantially all of the water from the selected portions.

22. (Original) A method according to claim 21, wherein the drying step includes placing the layered substrate in an oven.

23. (Original) A method according to claim 21, wherein the drying step includes blowing a stream of gas over the layered substrate.

24. (Previously Presented) A method according to claim 21, wherein the drying step includes both placing the layered substrate in an oven and blowing it with a stream of gas.

25. (Original) A method according to claim 23, wherein the step of exposing the one or more selected portions to the ionic solution is effected by dipping the substrate containing the masking layer into a bath of the ionic solution.

26. (Previously Presented) A method according to claim 1 wherein, after formation of the metal layer, the masking layer is removed.

27. (Original) A method according to claim 26 wherein a strongly basic solution is used to facilitate removal of the masking layer.

28. (Previously Presented) A method according to claim 1, wherein the masking layer is removed prior to the step of exposing the one or more selected portions to the ionic solution.

29. (Previously Presented) A method according to claim 1, wherein the desired metal layer is formed with a metal selected from the group consisting of copper, nickel, chromium, molybdenum, tantalum and any alloy of these metals.

30. (Previously Presented) A method according to claim 29, wherein the metal is selected from copper and nickel.

Claim 31 (Cancelled)

32. (Previously Presented) A product made according to the method of: providing a substrate surface, having a film of indium tin oxide (ITO) formed thereon,

for electroless deposition of a desired metal layer on one or more selected portions of said substrate surface;

applying a masking layer onto the substrate surface, said masking layer adapted to have one or more apertures formed therein so as to expose one or more selected portions of the substrate surface;

exposing the one or more selected portions of the substrate surface to a colloidal suspension of catalytic particles adapted to adsorb to the substrate surface and to enhance deposition of a desired metal layer thereon; and

exposing the one or more selected portions of the substrate surface to an ionic solution containing ions of the desired metal to enable formation of the metal layer on said one or more selected portions.